

CLAIMS

What is claimed is:

Claim 1. A protective coating comprising a homogeneous mixture of polyurea and microscopic granules thereby providing a property of diffuse reflectivity.

Claim 2. The protective coating in accordance with claim 1 wherein said microscopic granules are added to said homogeneous mixture in a range of inclusion from 0.2 to 0.8 ounces per gallon of said polyurea.

Claim 3. A protective coating in accordance with claim 1 wherein said microscopic granules capable of imparting the property of diffuse reflectivity range in size from 2 to 25 microns.

Claim 4. A protective coating in accordance with claim 2 wherein said microscopic granules capable of imparting the property of diffuse reflectivity range in size from 2 to 25 microns.

Claim 5. A protective coating in accordance with claim 1 wherein said homogeneous mixture further comprises a colored

1 pigment.

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3 Claim 6. A protective coating in accordance with claim 2  
4 wherein said homogeneous mixture further comprises a colored  
5 pigment.

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7 Claim 7. A protective coating in accordance with claim 3  
8 wherein said homogeneous mixture further comprises a colored  
9 pigment.

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11 Claim 8. A protective coating in accordance with claim 4  
12 wherein said homogeneous mixture further comprises a colored  
13 pigment.

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15 Claim 9. A protective coating in accordance with claim 1  
16 wherein said homogeneous mixture further comprises a  
17 synthetic filler.

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19 Claim 10. A protective coating in accordance with claim  
20 2 wherein said homogeneous mixture further comprises a  
21 synthetic filler.

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23 Claim 11. A protective coating in accordance with claim  
24 3 wherein said homogeneous mixture further comprises a

1 synthetic filler.

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3 Claim 12. A protective coating in accordance with claim  
4 4 wherein said homogeneous mixture further comprises a  
5 synthetic filler.

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7 Claim 13. A protective coating in accordance with claim  
8 5 wherein said homogeneous mixture further comprises a  
9 synthetic filler.

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11 Claim 14. A protective coating in accordance with claim  
12 6 wherein said homogeneous mixture further comprises a  
13 synthetic filler.

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15 Claim 15. A protective coating in accordance with claim  
16 7 wherein said homogeneous mixture further comprises a  
17 synthetic filler.

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19 Claim 16. A protective coating in accordance with claim  
20 8 wherein said homogeneous mixture further comprises a  
21 synthetic filler.

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23 Claim 17. A protective coating in accordance with claim  
24 9 wherein said synthetic filler is sodium magnesium

1 aluminosilicate.

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3 Claim 18. A protective coating in accordance with claim  
4 10 wherein said synthetic filler is sodium magnesium  
5 aluminosilicate.

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7 Claim 19. A protective coating in accordance with claim  
8 11 wherein said synthetic filler is sodium magnesium  
9 aluminosilicate.

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11 Claim 20. A protective coating in accordance with claim  
12 12 wherein said synthetic filler is sodium magnesium  
13 aluminosilicate.

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15 Claim 21. A protective coating in accordance with claim  
16 13 wherein said synthetic filler is sodium magnesium  
17 aluminosilicate.

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19 Claim 22. A protective coating in accordance with claim  
20 14 wherein said synthetic filler is sodium magnesium  
21 aluminosilicate.

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23 Claim 23. A protective coating in accordance with claim  
24 15 wherein said synthetic filler is sodium magnesium

1 aluminosilicate.

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3 Claim 24. A protective coating in accordance with claim  
4 16 wherein said synthetic filler is sodium magnesium  
5 aluminosilicate.

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7 Claim 25. A process for reducing thermal and radiant  
8 energy transmission and absorption of a substrate comprising  
9 the steps of:

10 a) providing a homogeneous mixture comprising polyurea  
11 and microscopic granules that impart diffuse reflectivity;  
12 and

13 b) applying the homogeneous mixture of step (a) to an  
14 outer surface of said substrate;

15 wherein upon curing of said homogeneous mixture upon  
16 said substrate, thermal and radiant energy transmission and  
17 absorption of said substrate is reduced.

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19 Claim 26. A process for protecting a substrate from  
20 thermal and corrosive exposure comprising the steps of:

21 a) providing a homogeneous mixture comprising polyurea  
22 and microscopic granules that impart diffuse reflectivity;  
23 and

24 b) applying the homogeneous mixture of step (a) to an

1 outer surface of said substrate;

2 wherein upon curing of said homogeneous mixture upon  
3 said substrate, said substrate is protected from mechanical,  
4 water, and corrosive damage, and thermal exposure.

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6 Claim 27. A protective coating comprising a homogeneous  
7 mixture of polyurea and borosilicate microspheres.

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9 Claim 28. The protective coating in accordance with  
10 claim 27 wherein said borosilicate microspheres are added to  
11 said homogeneous mixture in a range of inclusion from 0.2 to  
12 0.8 ounces per gallon of said polyurea.

13

14 Claim 29. A protective coating in accordance with claim  
15 27 wherein said borosilicate microspheres range in size from  
16 2 to 25 microns.

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18 Claim 30. A protective coating in accordance with claim  
19 28 wherein said borosilicate microspheres range in size from  
20 2 to 25 microns.

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22 Claim 31. A protective coating in accordance with claim  
23 27 wherein said homogeneous mixture further comprises a  
24 colored pigment.

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2       Claim 32. A protective coating in accordance with claim  
3 28 wherein said homogeneous mixture further comprises a  
4 colored pigment.

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6       Claim 33. A protective coating in accordance with claim  
7 29 wherein said homogeneous mixture further comprises a  
8 colored pigment.

9

10       Claim 34. A protective coating in accordance with claim  
11 30 wherein said homogeneous mixture further comprises a  
12 colored pigment.

13

14       Claim 35. A protective coating in accordance with claim  
15 27 wherein said homogeneous mixture further comprises a  
16 synthetic filler.

17

18       Claim 36. A protective coating in accordance with claim  
19 28 wherein said homogeneous mixture further comprises a  
20 synthetic filler.

21

22       Claim 37. A protective coating in accordance with claim  
23 29 wherein said homogeneous mixture further comprises a  
24 synthetic filler.

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2       Claim 38. A protective coating in accordance with claim  
3 30 wherein said homogeneous mixture further comprises a  
4 synthetic filler.

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6       Claim 39. A protective coating in accordance with claim  
7 31 wherein said homogeneous mixture further comprises a  
8 synthetic filler.

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10       Claim 40. A protective coating in accordance with claim  
11 32 wherein said homogeneous mixture further comprises a  
12 synthetic filler.

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14       Claim 41. A protective coating in accordance with claim  
15 33 wherein said homogeneous mixture further comprises a  
16 synthetic filler.

17

18       Claim 42. A protective coating in accordance with claim  
19 34 wherein said homogeneous mixture further comprises a  
20 synthetic filler.

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22       Claim 43. A protective coating in accordance with claim  
23 35 wherein said synthetic filler is sodium magnesium  
24 aluminosilicate.



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2       Claim 44. A protective coating in accordance with claim  
3 36 wherein said synthetic filler is sodium magnesium  
4 aluminosilicate.

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6       Claim 45. A protective coating in accordance with claim  
7 37 wherein said synthetic filler is sodium magnesium  
8 aluminosilicate.

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10       Claim 46. A protective coating in accordance with claim  
11 38 wherein said synthetic filler is sodium magnesium  
12 aluminosilicate.

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14       Claim 47. A protective coating in accordance with claim  
15 39 wherein said synthetic filler is sodium magnesium  
16 aluminosilicate.

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18       Claim 48. A protective coating in accordance with claim  
19 40 wherein said synthetic filler is sodium magnesium  
20 aluminosilicate.

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22       Claim 49. A protective coating in accordance with claim  
23 41 wherein said synthetic filler is sodium magnesium  
24 aluminosilicate.

1        Claim 50. A protective coating in accordance with claim  
2        42 wherein said synthetic filler is sodium magnesium  
3        aluminosilicate.

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5        Claim 51. A process for reducing thermal and radiant  
6        energy transmission and absorption of a substrate comprising  
7        the steps of:

8        a) providing a homogeneous mixture comprising polyurea  
9        and borosilicate microspheres; and

10       b) applying the homogeneous mixture of step (a) to an  
11       outer surface of said substrate;

12       wherein upon curing of said homogeneous mixture upon  
13       said substrate thermal and radiant energy transmission and  
14       absorption of said substrate is reduced.

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16       Claim 52. A process for protecting a substrate from  
17       thermal and corrosive exposure comprising the steps of:

18       a) providing a homogeneous mixture comprising polyurea  
19       and borosilicate microspheres; and

20       b) applying the homogeneous mixture of step (a) to an  
21       outer surface of said substrate;

22       wherein upon curing of said homogeneous mixture upon  
23       said substrate said substrate is protected from thermal and  
24       corrosive exposure.